CLAIMS

1. Secondary electrochemical generator, with an alkaline electrolyte, containing a non-sintered electrode comprising a two-dimensional conductive support covered by a layer containing an electrochemically active material and a binder, characterized in that the said binder is a mixture of a cellulose compound and a styrene-acrylate copolymer of general formula:

$$[\,(-CH_2\text{-}CHC_6H_5\text{-})_P\,(-CH_2CHCOOR\text{-})_q]_x.$$

2. Generator according to claim 1, in which the proportion of the said styrene-acrylate copolymer is less than 4% by weight of the said layer.

3. Generator according to claim 2, in which the proportion of the said styrene-acrylate copolymer is between 0.15% and 3% by weight of the said layer.

4. Generator according to claim 1, in which the said cellulose compound is chosen from methylcellulose, carboxymethylcellulose, hydroxypropylmethyl-cellulose, hydroxypropylcellulose and hydroxyethylcellulose.

5. Generator according to claim 1, in which the proportion of the said cellulose compound is comprised between 0.1 and 1% by weight of the said layer.

6. Generator according to claim 1, in which the said electrochemically active material comprises a nickel hydroxide.

7. Generator according to claim 6, in which the said nickel hydroxide also contains at least one syncrystallized hydroxide of an element chosen from zinc, cadmium and magnesium and at least one syncrystallized hydroxide of

an element chosen from cobalt, manganese, aluminium, yttrium, calcium, strontium, zirconium, copper.

8. Generator according to claim 6, in which the said nickel hydroxide has a spheroidal shape and has a grain size comprised between 7 µm and 20 microns.

9. Generator according to claim 1, in which the said layer also comprises a conductive material consisting principally of a compound of cobalt.

10. Generator according to claim 9, in which the said compound of cobalt is chosen from cobalt metal Co, cobalt oxide CoO, cobalt hydroxide $Co(OH)_2$, the mixed oxide of lithium and cobalt $LiCoO_2$ and an oxide of conductive cobalt oxide of a valency greater than 2.

11. Generator according to claim 1, in which the said layer also contains at least one other compound chosen from the compounds of zinc, yttrium, ytterbium and calcium.

12. Generator according to claim 11, in which the said compound is a compound of yttrium.

13. Generator according to claim 12, in which the said compound of yttrium is chosen from yttrium oxide Y_2O_3 and yttrium hydroxide $Y(OH)_3$.

14. Generator according to claim 11, in which the said compound is a compound of ytterbium.

15. Generator according to claim 14, in which the said compound of ytterbium is chosen from ytterbium oxide Yb_2O_3 and ytterbium hydroxide $Yb(OH)_3$.

16. Generator according to claim 1, in which the said layer also contains polymer fibres.

17. Generator according to claim 1, in which the said two-dimensional conductive support is chosen from a solid or perforated strip, an expanded metal, a grid and a fabric.

18. Generator according to claim 1, also comprising a metal-hydride negative electrode.